



# **Pre-Proposal Workshop**

## **(PON -08-007)**

**Solicitation for RD&D Projects for Improving  
Energy Efficiency in California's Food  
Processing and Dairy Processing Industry**  
January 9, 2009

**PIER Industrial/Agriculture/Water Program  
California Energy Commission**



# Agenda

Opening Remarks by Pramod Kulkarni

IAW Program & the Food Processing Industry

Overview of Grant Solicitation Application Manual

Question and Answer



# Housekeeping

- .... in case of fire
- ..... local facilities
- ..... workshop team
- .... muting of web during presentation
- ... Q&A protocol



# Solicitation for RD&D Projects for Improving Energy Efficiency in California's Food Processing and Dairy Processing Industry

[www.energy.ca.gov/contracts/PON-08-007/](http://www.energy.ca.gov/contracts/PON-08-007/)

# PIER Program



- In 1996 Assembly Bill 1890 provided the authority for the Public Interest Energy Research (PIER) Program. Senate Bill 1250 provided amendments.
- \$62.5 million collected annually from investor-owned electric utility ratepayers & \$ 21 million for Natural Gas “public interest” energy RD&D efforts not adequately provided by competitive and regulated markets.
- The California Energy Commission administers these funds through the PIER program.

# PIER PROGRAM



PIER funding efforts are focused on the following RD&D research areas:

- Industrial/Agricultural/Water End-Use Energy Efficiency (IAW)
- Buildings End-Use Energy Efficiency
- Energy-Related Environmental Research
- Energy Systems Integration
- Environmentally-Preferred Advanced Generation
- Renewable Energy Technologies
- Transportation Research

# Solicitation Background



- This competitive grant solicitation is being issued by PIER's Industrial/Agricultural/Water program.
- This competitive grant solicitation is seeking technologies and/or scientific advances that will significantly reduce energy and water use in California's food and dairy processing industries. Examples: Improve energy efficiency for existing technologies, fossil fuel substitution or process optimization.

# Since 2003 PIER Has Invested \$ 6 million in Food Processing RD&D



1. Thermally Driven Heat Pump
2. Electrodialysis for Wine Processing
3. Ultra Low-NOx Burner Control
4. Topping Cycle for Retorts
5. Infrared Drying Technology
6. Benchmarking Energy & Water in Wineries
7. Benchmarking of Refrigerated Warehouses
8. Fouling Reduction in Plate Heat Exchangers

9. Liquid Desiccant Defrosting
10. Blast Freezer Fan Modulation
11. Pre-cooling Industry Assessment.
12. Benchmarking of Dairy Processing Industry
13. Solar Process Heat at Frito-Lay
14. High Efficiency Gas-Fired Drum Dryer for Food Applications



# Examples of Successful Food Industry PIER RD&D Projects



# Eligible Projects



- The eligible projects under food processing and dairy include but are not limited to, vegetable and fruit processing; production of milk and processing of milk into cheese, whey, powder etc; wineries, breweries and soft drink production; meat & poultry processing; and bakeries.
- Besides energy efficiency, proposals that reduce the use of water or wastewater leading to **direct** energy savings at the user site are also eligible.
- Food processing and dairy industry projects that clearly and directly reduce greenhouse gases in addition to improving energy efficiency are encouraged to apply.
- Proposals must provide a market connection for the proposed technology and a potential benefit to electricity gas ratepayers in California.

# Eligible Applicants



- This is an open solicitation seeking proposals from public, private and individual entities actively involved in energy efficiency research, development and demonstration.
- To be eligible, applicants must present a team with demonstrated capabilities in successful completion of research, technology development and demonstration projects.

# Eligible Applicants



- **Individuals:** Must be acting independently. If employed or affiliated with an organization, applicant must have authorization from the organization to pursue project development independently as an individual with no rights reserved to the organization.
- **Note:** Proposers who are employed by a college/university or affiliated laboratory are not eligible to apply as individuals; submission for such employees must be made through the proposer's home institution.
- Only one proposal per Principal Investigator(PI) is allowed.

# Funding Information



- Approximately \$2,000,000 in funding is available under this solicitation for grant awards.
- A maximum of \$400,000 is available for each approved project.
- The research projects are expected to last up to 24 months from the agreement start date.
- In case of a high number of exceptional, desirable projects, the program may release additional funds upon approval from the PIER Program Management.

# Cost-Sharing



- Cost-sharing is required and is a consideration in the evaluation process.
- Match funding of **25%**, either in cash or in-kind, of the requested PIER funding is **required**.
- Proposals with higher match funding are desirable and will be scored higher.

# Selection and Award Process



The following process will be utilized to recommend project(s) for funding:

1. Based on the proposals submitted, a scoring committee will score the projects using the scoring criteria described in Attachment E.
2. A **minimum score of 98** (out of 140) with no score which is less than 5, before weighting, in any of the first 8 scoring criteria is required to be eligible for funding.



# Selection and Award Process



4. Projects receiving a score of 98 or more will be ranked according to their overall score.
5. The Commission's Research, Development, and Demonstration (RD&D) Policy Committee will recommend how far down the ranked list of passing proposals to make awards.
6. A Notice of Proposed Awards will be released.
7. A Grant Agreement will be written and sent to the Recipient(s) for review, approval, and signature. Funding will be awarded only upon satisfactory completion of these documents.



# Selection and Award Process



- The completed agreement will be taken to the Energy Commission Business meeting for approval.
- Once all parties have approved the agreement it will be finalized and executed. Recipient(s) are approved to begin the project only after full execution of the Grant Agreement.

# CBE Requirements



## California-Based Entity (CBE) Preference Points Questionnaire

- Applicants meeting the criteria of a California-Based Entity (CBE) may have preference points added to their final technical score, subject to certain restrictions. Please see Exhibit I for more information.
- Eligible applicants must request and demonstrate eligibility by filling out and submitting as part of the proposal package the questionnaire contained in Exhibit J.



The CBE preference points will be awarded as follows:

<b><i>Technical Score (prior to preference points being added)</i></b>	<b><i>Additional Points</i></b>
105-113	1.5
114-122	3
123-131	4.5
132-140	6
141-150	7.5

# Schedule of Grant Award Process



Release of Program Opportunity Notice.....December 22, 2008

Proposal Workshop.....January 9, 2009 10 a.m.

Deadline to Submit Questions.....January 15, 2009

Questions and Answers Posted on Website....January 23, 2009

**Deadline to Submit Proposals.....February 10, 2009 4:00p.m.**

Interview Applicants (if Necessary)..... March 2-6, 2009

Post Notice of Proposed Awards..... Estimated April 15, 2009

CEC Business Meeting..... Estimated June 2009

# Confidential Information



No confidential information will be accepted during the proposal and selection phase of this solicitation. If any confidential information is submitted, the entire proposal will be rejected and will not be eligible for funding.

# Proposal Submission



One (1) original and five (5) copies of the grant application and a CD containing all the documents **must be received no later than the due date. Mail completed grant applications to:**

California Energy Commission  
Grants and Loans Office

Attn: Food Processing and Dairy Processing Program  
1516 Ninth Street, MS-1  
Sacramento, CA 95814

Contact for more  
information or Questions



Questions???

California Energy Commission  
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